

IN THE SPECIFICATION:

Please replace the paragraph beginning on page 13, line 17, and continuing to Page 14, line 3, with the following rewritten paragraph:

--As shown in Fig. 3, the color wheel 2 is divided into 4 segments including color filters Cr, Cg, and Cb that transmit R, G, and B, respectively. The color wheel 2 further includes a color filter Cw such as a neutral density filter that transmits white light. This filter Cw shows almost flat spectral characteristics, as opposed to the filters Cr, Cg, and Cb. Let the color filters Cr, Cg, Cb, and Cw have transmissivities of  $f_r(\lambda)$ ,  $f_g(\lambda)$ ,  $f_b(\lambda)$ , and  $f_w(\lambda)$ , respectively.  $f_w(\lambda)$  is so set as to satisfy Eq. (1) below:

$$\int_{380}^{780} f_w(\lambda) \cdot V(\lambda) d\lambda = \frac{1}{8} \cdot \int_{380}^{780} \{f_r(\lambda) + f_g(\lambda) + f_b(\lambda)\} V(\lambda) d\lambda \quad (1)$$

where  $(\lambda)$  is the wavelength of light,  $V(\lambda)$  is the relative spectral sensitivity characteristic of the human eye, and  $1/K$  is a coefficient determining the transmissivity of Cw.--

Please replace the paragraph beginning on page 14, line 17, and continuing to page 15, line 2, with the following rewritten paragraph:

--As mentioned above, where a light valve such as a DMD is used, if the minimum switching time is 0.030 ms, it is difficult to achieve 256 gray levels. Therefore,  $1/K$  is set to  $1/2^P$  (where  $P$  is a natural number), i.e.,  $1/2$ ,  $1/4$ ,  $1/8$ ,  $1/16$ , and so forth. However, where  $K$  has a small value, the minimum switching time of the light valve poses a constraint. Where  $K$  has a large value, the segment Cw widens and thus the color filters Cr, Cg, and Cb become narrowed. This will narrow the full range of gray

*B2*  
*Cancel*  
scale in representing R, G, and B colors. Of these limiting conditions,  $K=8$  is selected because it is well applied to a display device. This case is discussed below.--

---

Please replace the paragraph beginning on page 16, line 15, with the following rewritten paragraph:

---

--The color wheel 2 makes one revolution in  $1/60 \text{ sec} \cong 16.667 \text{ msec}$  (3600 rpm).

This rotation is synchronized with the frame rate of the displayed image. The color

*B3*  
wheel 2 has 4 color filters that form four boundaries as can be seen from the figure. In

this case, therefore, the ineffective time is about  $15^\circ \times 4 / 360^\circ \times 16.667 \text{ msec} \cong 2.778$

msec. The effective time is about  $16.667 \text{ msec} - 2.778 \text{ msec} = 13.889 \text{ msec}$ .--

---